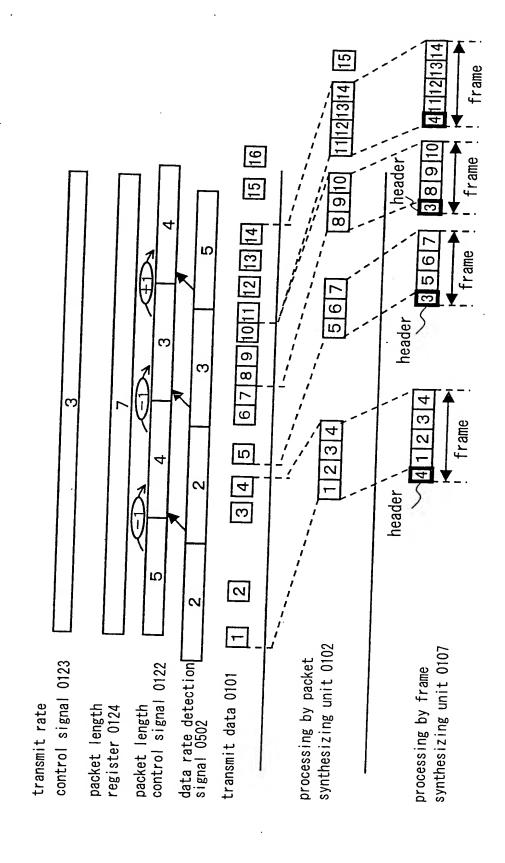


processing by frame synthesizing unit 0107 processing by packet synthesizing unit 0102 transmit data 0101 timer termination register 0302 reset signal 0305 transmit instructing signal 0304 transmit rate control signal 0123 timer 0301 packet length control signal 0122 7) 0 1 2 3 4 5 6 7 8 9 ω 4 header 5 თ FIG. 4 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 ω frame ω G 4 ω O header 9 10 11 12 13 14 15 თ frame 0 1 2 3 4 8 ω 9

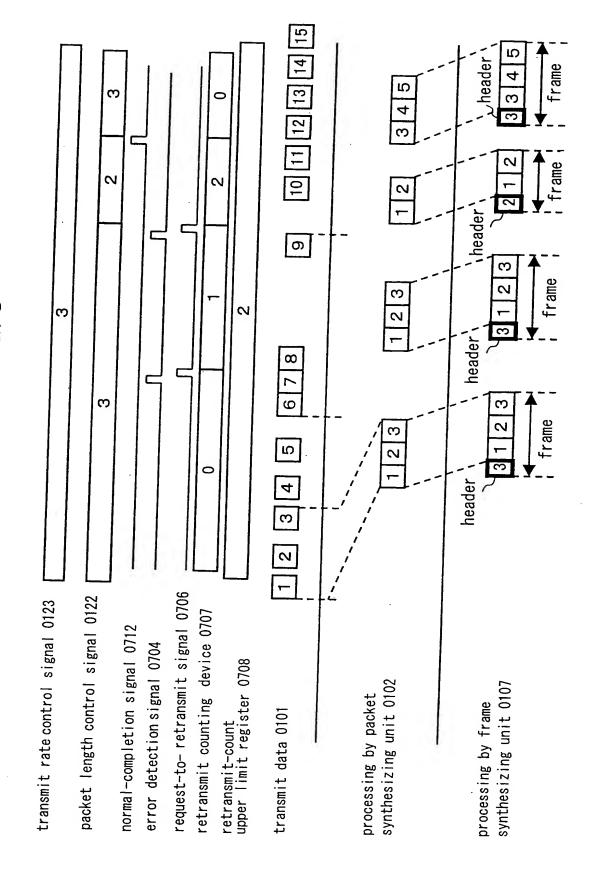
Wireless transmit 0110 antenna 0122 packet length control signal signal transmit unit Wireless 0109 transmit frame packet length control signal 0108 -01200107 0124 synthesizing frame transmit packet data unit 0122 packet length rate controlling device **√ 0105** packet length packet length controlling unit synthesizing 0103 register packet 0503 0102 buffer unit packet length controlling unit 0120 0104 packet length setting signal 0121 data rate detection signal 0503 packet length setting signal 0121 transmit rate control signal **0123** detecting unit 0502 0501 data rate transmit data

FIG. 5

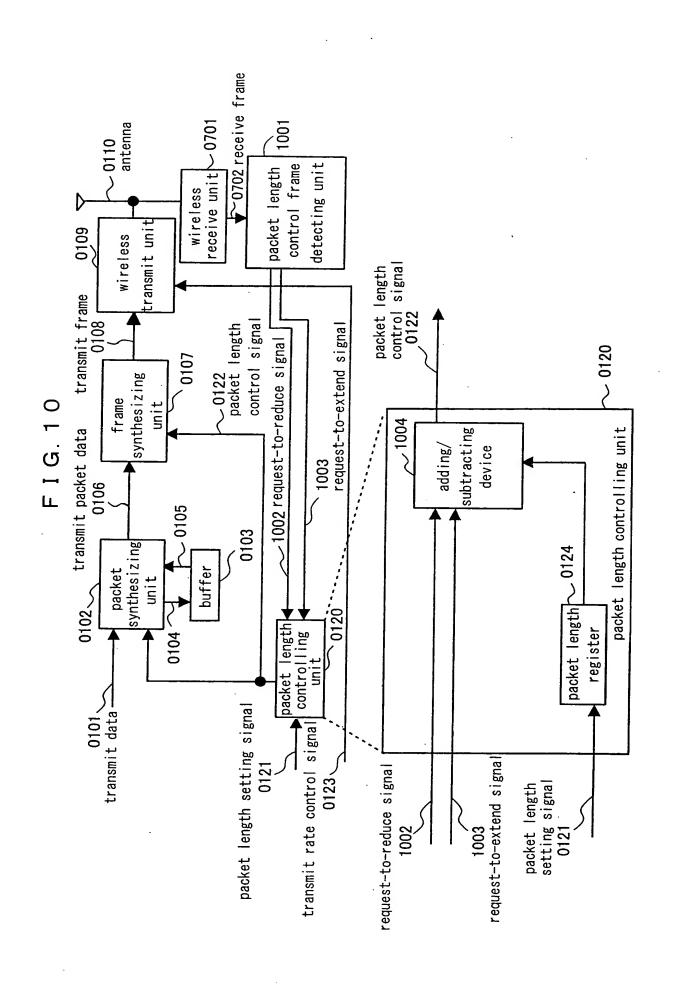


F I G. 7

F I G. 8

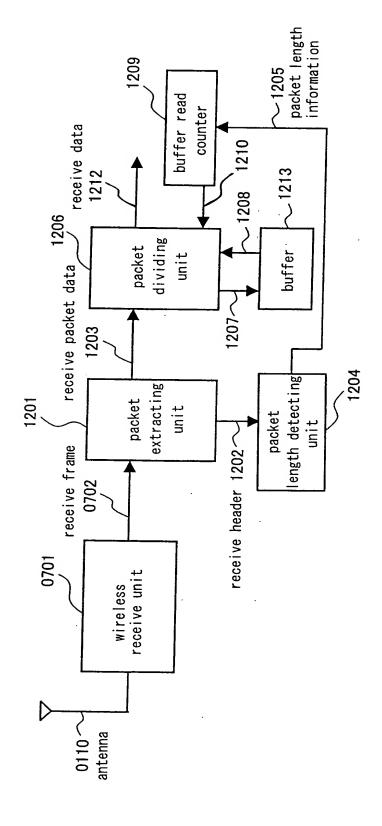


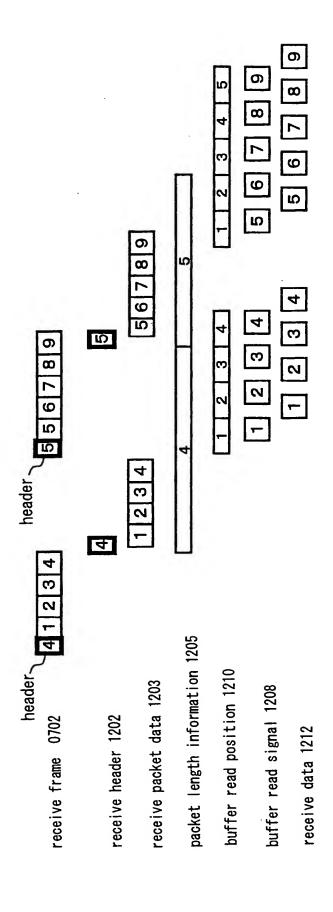
F I G. 9



packet length register 0124 packet length control signal 0122 transmit rate control signal 0123 transmit data 0101 synthesizing unit 0102 processing by packet request-to-extend signal1003 packet length packet length request-to-reduce signal1002 receive frame 0702 synthesizing unit 0107 processing by frame 10 packet cuntrol ω 4 header G frame ω ယ O ယ 4 packet cuntrol 8 9 header 10 11 တ ω 12 13 14 IJ frame 6 œ 3 ω header frame 15 9 16 header frame 15

FIG. 11





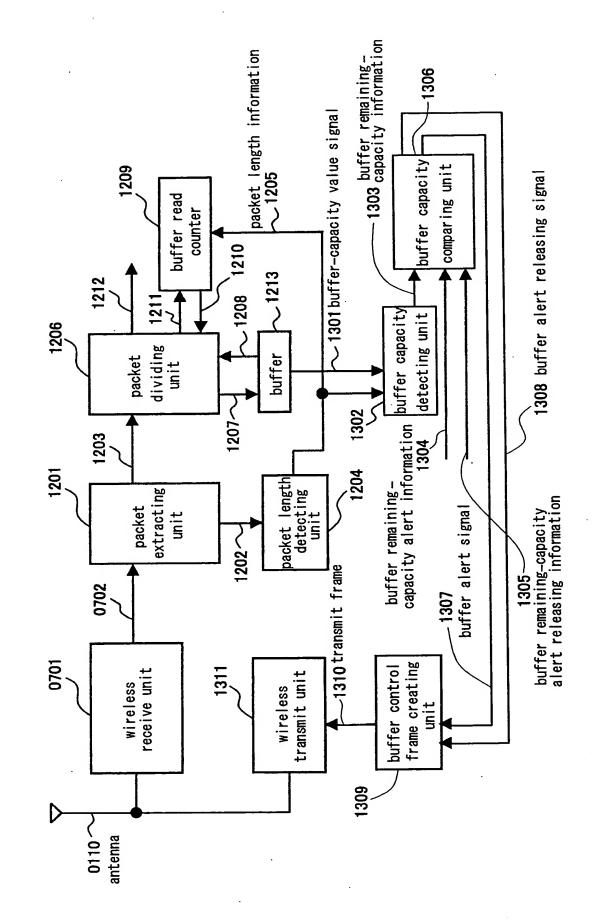
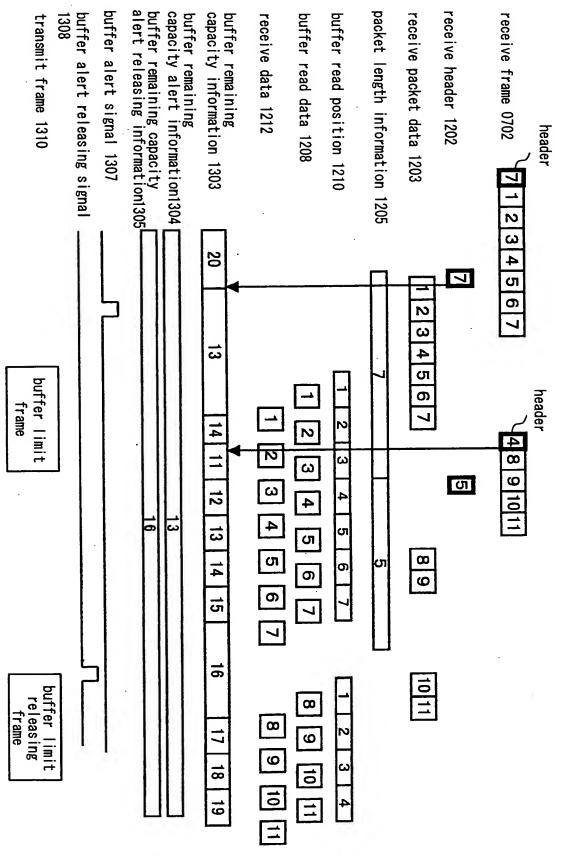
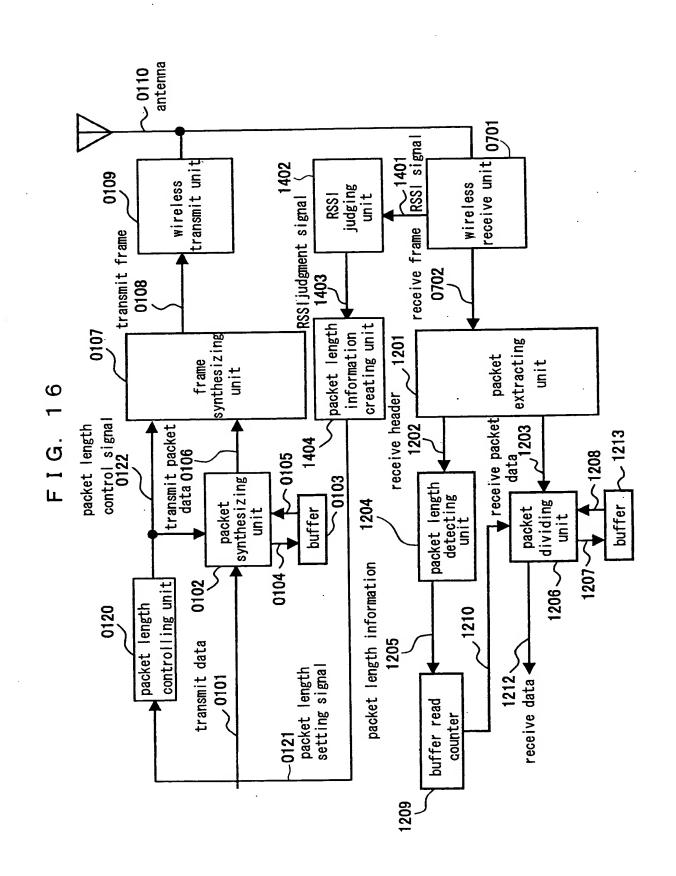
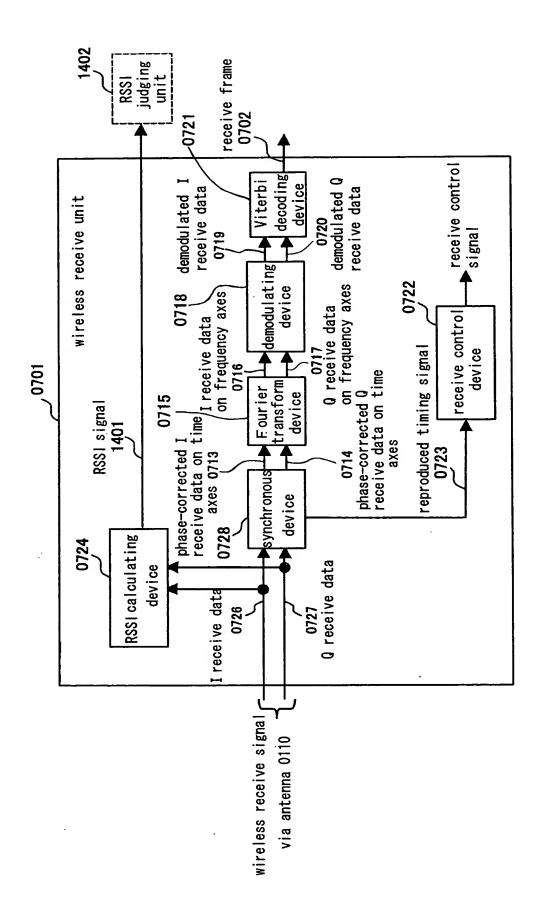
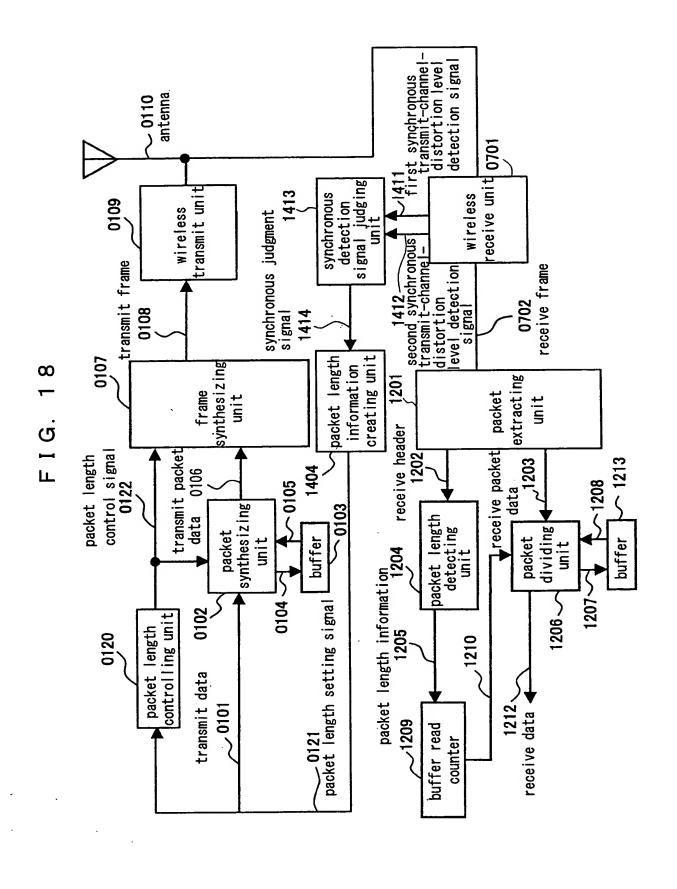


FIG. 15







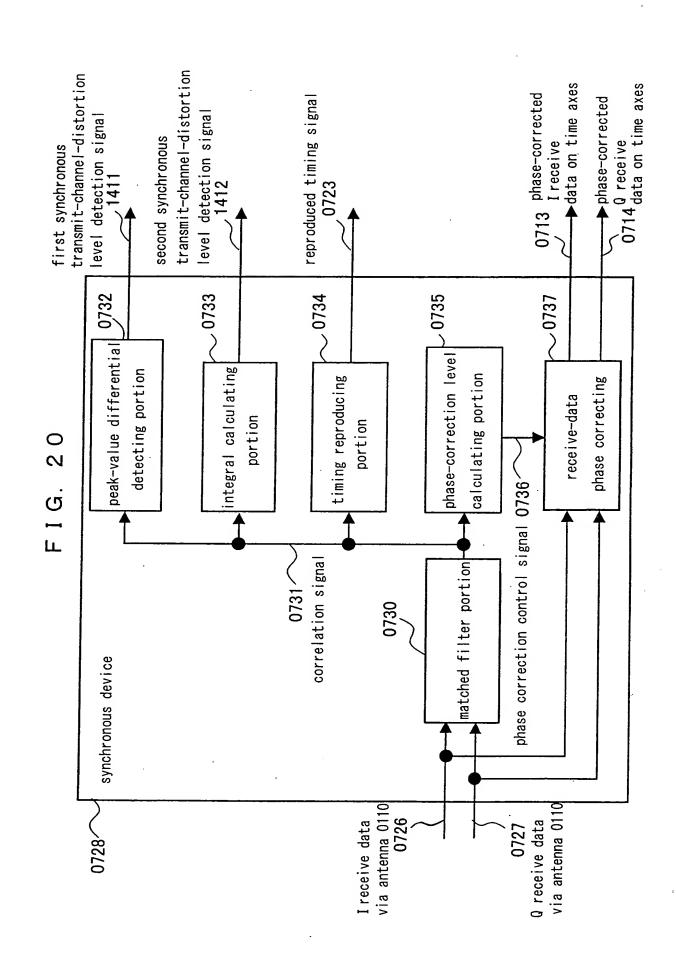


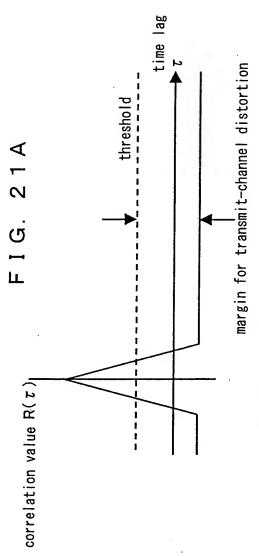
receive frame wireless receive unit 0718 demodulated I  $\frac{0}{7}$ 21 decoding 0720 demodulated Q Viterbi receive data receive data - demodulating device O receive data on frequency axes 0715 on frequency axes 0716 transmit-channel-distortion <u>ე</u> Ireceive data reproduced timing signal 0,22 0701 level detection signal receive data on time 0717 first synchronous phase-corrected Q receive data on time phase-corrected transform ▼ Fourier device 0713 axes 71411 0723 0714 synchronous device 0728 O receive data I receive data 0727 transmit-channel-distortion wireless receive signal r level detection signal via antenna 0110 second synchronous 1412 -

receive control

receive control

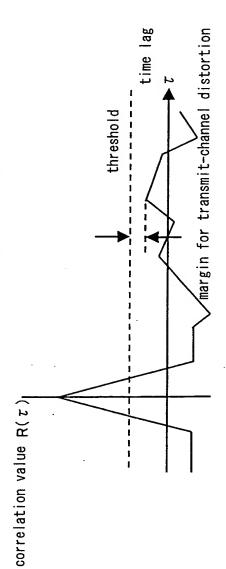
device





waveform in the case of ideal data showing a distinct peak of correlation signal

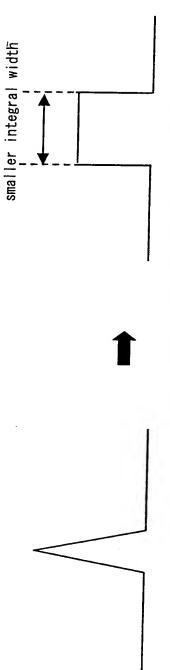




waveform in the case of data appended by transmit-channel distortion showing peaks of correlation signal

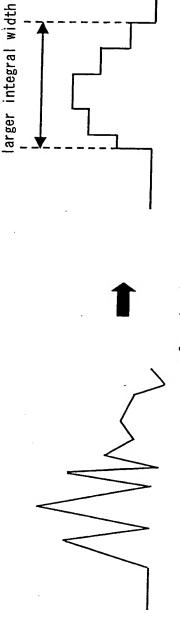
shift register

FIG. 23A



integral width in the case of ideal date showing a distinct peak of correlation signal

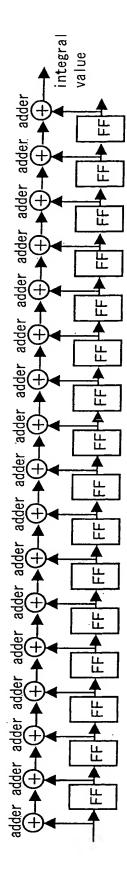
FIG. 23B

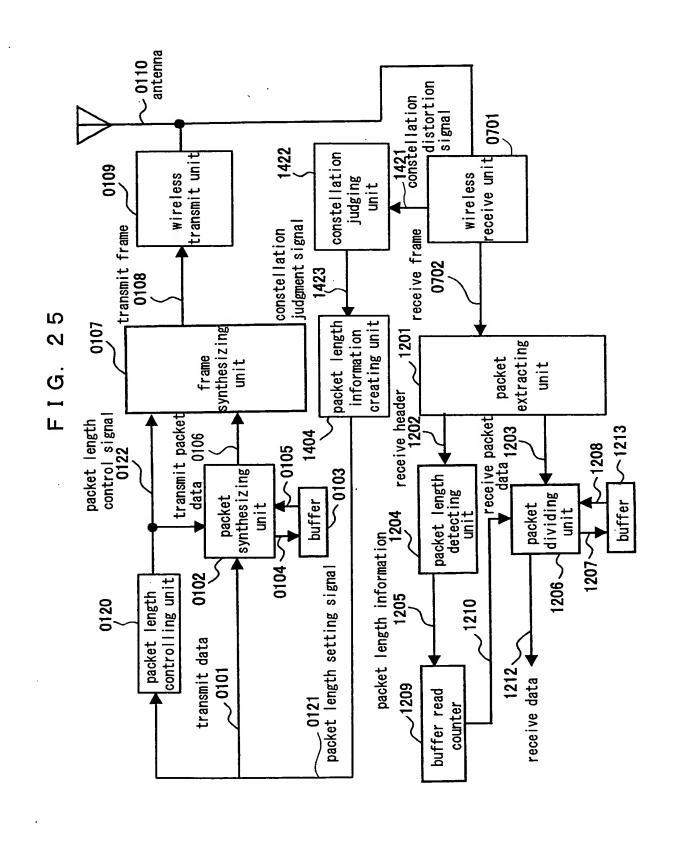


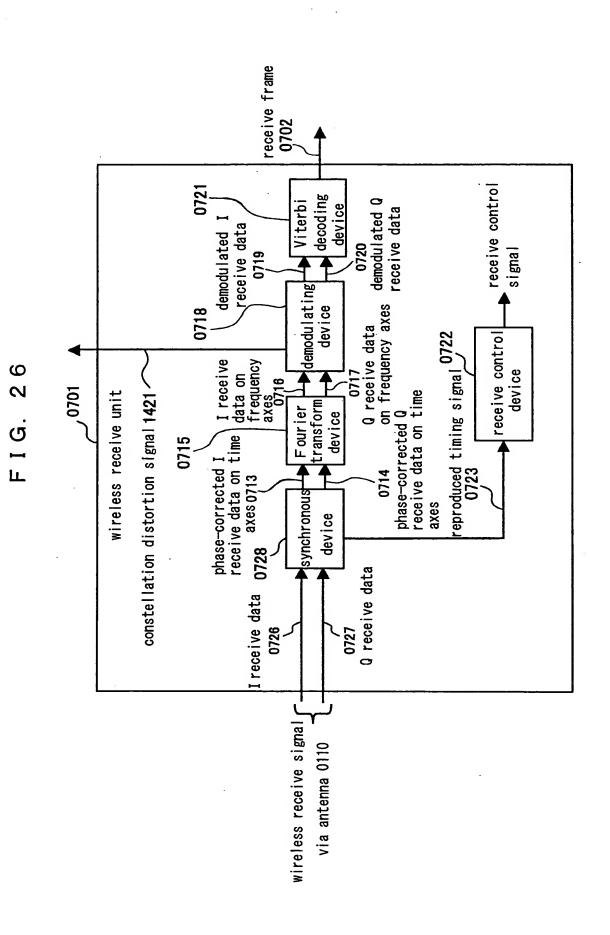
waveform in the case of data appended by transmit-channel distortion showing peaks of correlation signal

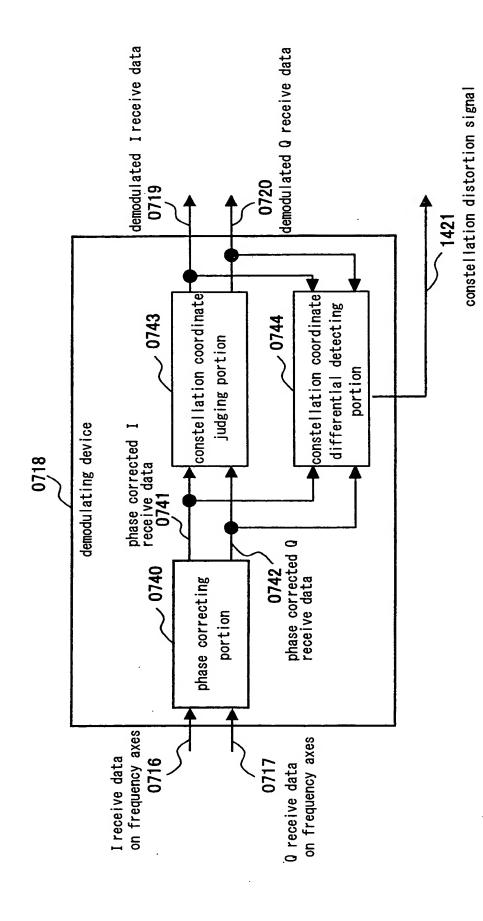
integral calculating portion

0733









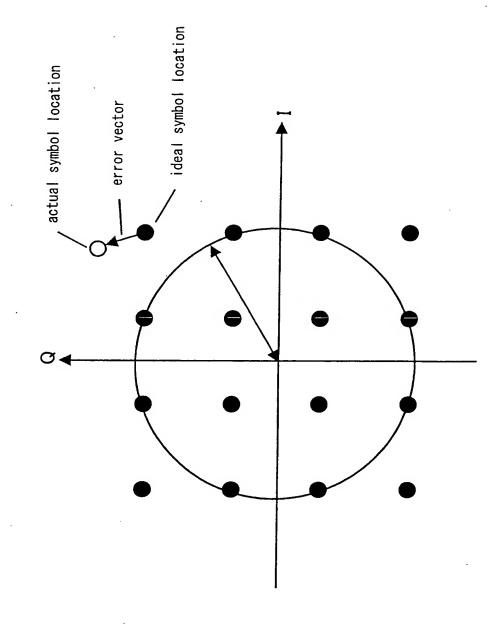
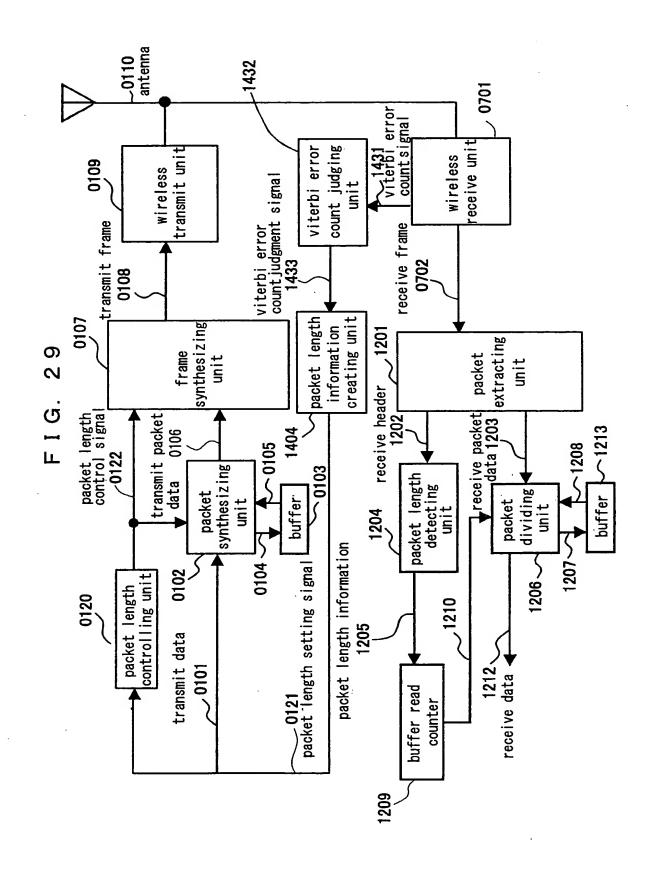
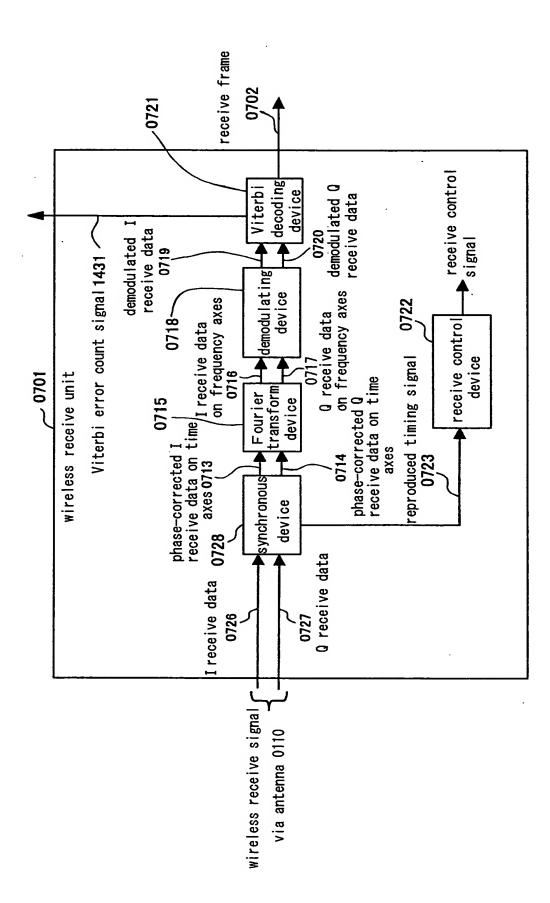
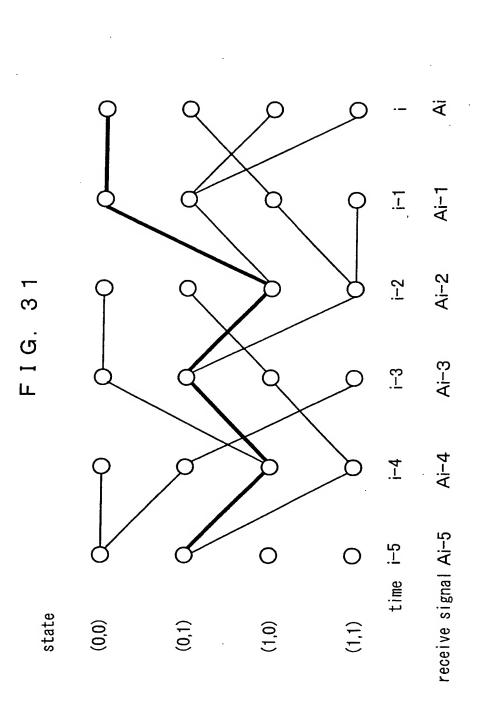


FIG. 28

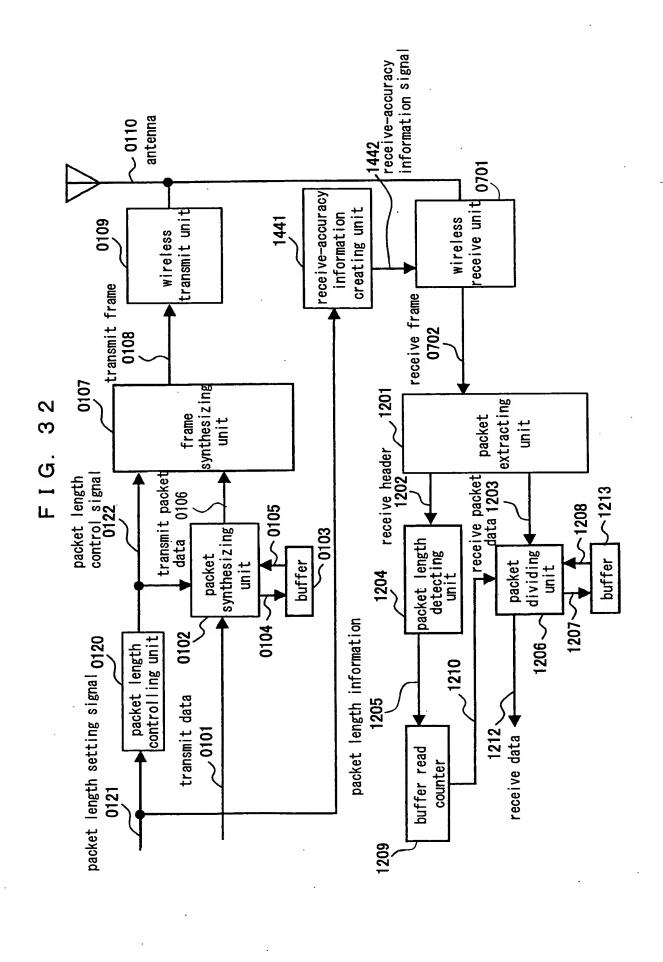


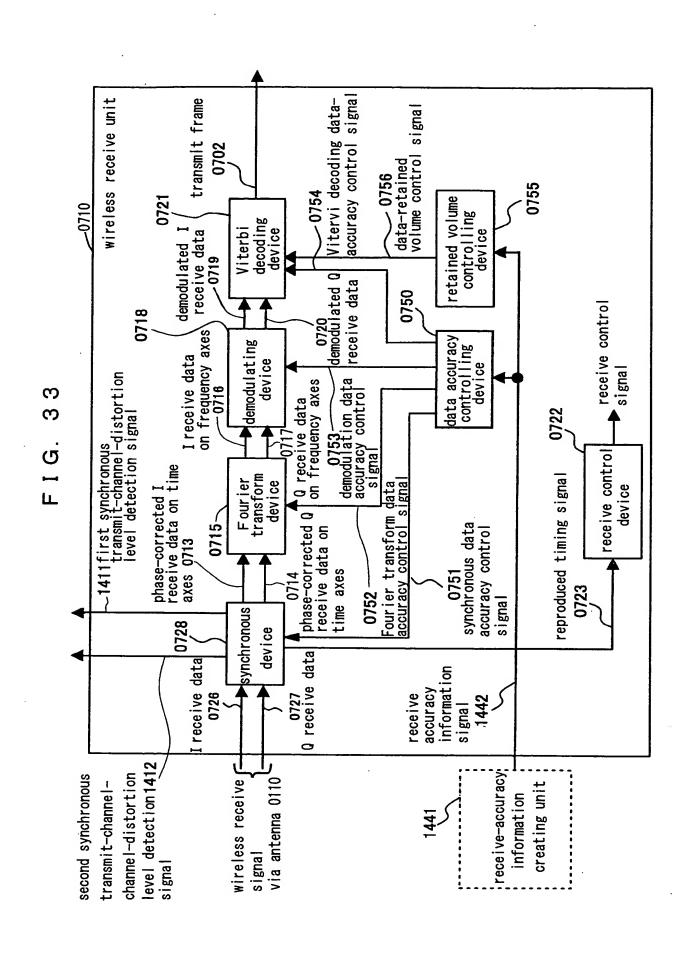
F1G. 30





maximum-likelihood path





antenna **Jol 10** 0109 transmit unit transmit packet data wireless PRIOR ART FIG.35 ART F I G. 34 O 0106 PRIOR N 0105 0103 8 packet synthesizing 0102 9 unit buffer വ 0104 က 3 4 transmit datatransmit data 0101 1 2 processing by packet synthesizing unit 0102